Application No. 10/772,430
Amendment dated September 25, 2007
Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1 Art Unit: 3714 Page 3 of 22

<u>AMENDMENTS TO THE CLAIMS</u>

1. (Currently Amended) A riding simulation system for providing an operator with a pseudo-experience of running conditions of a motorcycle by displaying scenery seen to the rider as a video image on a display based on the operating condition of operation by the operator, said riding simulation system comprising:

a steering handle mechanism gripped and operated by the operator;

a step mechanism comprising a brake pedal and a gear change pedal which are operated by the feet of the operator;

a connection shaft for connecting said steering handle mechanism and said step mechanism to each other, said connection shaft provided to be extendable and contractable along the axial direction thereof; and

a frame body having at least two main frames,

wherein support means for supporting said steering handle mechanism is mounted at upper portions of the at least two main frames or said and the connection shaft is mounted to lower portions of the at least two main frames.

2. (Original) The riding simulation system as set forth in claim 1, wherein said connection shaft is provided to be inclinable relative to said steering handle mechanism or said step mechanism.

Application No. 10/772,430 Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1
Art Unit: 3714

Page 4 of 22

3. (Original) The riding simulation system as set forth in claim 1, further

comprising a vibrator for a dummy engine vibration.

4. (Currently Amended) The riding simulation system as set forth in claim 1,

further comprising means for giving a reaction force in an in a direction opposite to a turning

direction of said steering handle mechanism.

5. (Currently Amended) A riding simulation system for providing an operator

with a pseudo-experience of a running condition of a motorcycle by generating a vibration

based on the operating condition by the operator, said riding simulation system comprising:

a vibrator for a dummy engine vibration in a steering handle mechanism;

a taper surface portion formed at an inner circumferential surface of a steering

handle pipe constituting said steering handle mechanism, said taper surface portion gradually

decreasing in diameter from the side of an end portion of said steering handle pipe; and

a bracket having an engaging portion for engagement with said end portion of said

steering handle pipe, having an outer circumferential surface gradually decreasing in

diameter from the side of said engaging portion, and being inserted into said taper surface

portion while holding said vibrator,

wherein the bracket includes a pair of brackets,

Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1
Art Unit: 3714

Page 5 of 22

wherein each of the brackets includes a recess on an inner surface thereof, and when

the brackets are mated together, the recesses of the mating brackets form a space in which

the vibrator is disposed.

6. (Currently Amended) A riding simulation system comprising a vibrator for a

dummy engine vibration in a steering handle mechanism and providing an operator with a

pseudo-experience of a running condition of a motorcycle by generating a vibration based on

the operating condition by the operator, said riding simulation system comprising:

a bracket having an enclosed hollow space, the bracket being screw-engaged with an

end portion of a steering handle pipe constituting said steering handle mechanism, wherein

said vibrator is inserted into the inside of said steering handle pipe in the state of being held

by said bracket,

wherein the vibrator includes an eccentrically mounted weight extending from an

outer end of the vibrator so as to be disposed in the enclosed hollow space.

7 (Currently Amended) A riding simulation system comprising a vibrator for a

dummy engine vibration in a steering handle mechanism and providing an operator with a

pseudo-experience of a running condition of a motorcycle by generating a vibration based on

the operating condition by the operator,

wherein said vibrator is inserted in a bracket and held in the in an inside of one end

portion of a steering handle pipe constituting said steering handle mechanism, and a

Application No. 10/772,430 Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1 Art Unit: 3714

Page 6 of 22

predetermined gap is formed between an outer circumferential portion of said one end

portion of said steering handle pipe and a steering handle grip attached to said outer

circumferential portion,

wherein the bracket includes a pair of brackets,

wherein each of the brackets includes a recess on an inner surface thereof, and when

the brackets are mated together, the recesses of the mating brackets form a space in which

the vibrator is disposed.

8 (Original) The riding simulation system as set forth in claim 7, wherein said

steering handle grip is a throttle grip.

9. (Original) The riding simulation system as set forth in claim 7, wherein said

steering handle pipe is comprised of a single pipe communicating one end portion, on which

said throttle grip is mounted, and the other end portion to each other.

10. (Original) The riding simulation system as set forth in claim 8, wherein said

steering handle pipe is comprised of a single pipe communicating one end portion, on which

said throttle grip is mounted, and the other end portion to each other.

11. (Currently Amended) A riding simulation system for providing an operator

with a pseudo-experience of running conditions of a motorcycle by displaying scenery seen

Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1

Art Unit: 3714

Page 7 of 22

to the rider as a video image on a display based on an operating condition upon an operation

by the operator and detecting a gear change by a sensor provided at a gear change pedal, said

riding simulation system comprising:

click generating means for generating a click feeling similar to a gear change in an

actual motorcycle when a gear change is made by operating said gear change pedal,

wherein the click generating means comprises a ball member and triangular cover

member provided with a hole portion in which the ball member is engaged when said gear

change pedal is in a center position.

12. (Currently Amended) A riding simulation system as set forth in-claim 1_claim

11, wherein said click generating means comprises a ball-member, and a hole portion in

which said ball member is engaged when said gear change pedal is in a center position; and,

when a gear change is made by operating said gear change pedal, said ball member is

released from said hole portion and thereafter again engaged in said hole portion, whereby a

click sound and a vibration are generated.

13. (Currently Amended) A riding simulation system for providing an operator

with a pseudo-experience of running conditions of a motorcycle by displaying scenery seen

to the rider as a video image on a display based on an operating condition of a dummy

operating mechanism operated by the operator, said riding simulation system comprising:

a handle mechanism for operating a steering handle with a handle shaft portion as a

Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1
Art Unit: 3714

Page 8 of 22

turning fulcrum by said operator,

a frame portion including a plurality of main frames for supporting said steering

handle shaft portion, and

a single spring for giving a reaction force in a direction opposite to the turning

direction of said steering handle when said steering handle is operated, wherein said single

spring is provided with a pair of clamping portions projected outwards from said steering

handle shaft portion so as to clamp said frame portion external surfaces of one of the main

frames therebetween.

14. (Original) The riding simulation system as set forth in claim 13, wherein

elastic members are interposed between said pair of clamping portions of said spring and said

frame.

15. (New) The riding simulation system as set forth in claim 3, further comprising:

a taper surface portion formed at an inner circumferential surface of a steering

handle pipe constituting said steering handle mechanism, said taper surface portion gradually

decreasing in diameter from the side of an end portion of said steering handle pipe; and

a bracket having an engaging portion for engagement with said end portion of said

steering handle pipe, having an outer circumferential surface gradually decreasing in

diameter from the side of said engaging portion, and being inserted into said taper surface

portion while holding said vibrator

wherein the bracket includes a pair of brackets,

wherein each of the brackets includes a recess on an inner surface thereof, and when

the brackets at mated together, the recesses of the mating brackets form a space in which the

vibrator is disposed.

16. (New) The riding simulation system as set forth in claim 3, further comprising:

a bracket having a hollow space, the bracket being screw-engaged with an end

portion of a steering handle pipe constituting said steering handle mechanism, wherein said

vibrator is inserted into the inside of said steering handle pipe in the state of being held by

said bracket,

wherein the vibrator includes an eccentrically mounted weight extending from an

outer end of the vibrator so as to be disposed in the hollow space.

17. (New) The riding simulation system as set forth in claim 4, further comprising:

a single spring for giving a reaction force in a direction opposite to the turning

direction of said steering handle when said steering handle is operated, wherein said single

spring is provided with a pair of clamping portions projected outwards from said steering

handle shaft portion so as to clamp external surfaces of one of the at least two main frames

therebetween.

18. (New) The riding simulation system as set forth in claim 5, further comprising:

Amendment dated September 25, 2007

Reply to Office Action of June 25, 2007

Docket No. 0505-1266PUS1

Art Unit: 3714

Page 10 of 22

a step mechanism comprising a brake pedal and a gear change pedal which are

operated by the feet of the operator;

a connection shaft for connecting said steering handle mechanism and said step

mechanism to each other, said connection shaft provided to be extendable and contractable

along the axial direction thereof; and

a frame body having at least two main frames,

wherein said steering handle mechanism is mounted at upper portions of the at least

two main frames and the connection shaft is mounted to lower portions of the at least two

main frames.

19. (New) The riding simulation system as set forth in claim 11, further comprising:

a step mechanism comprising a brake pedal and a gear change pedal which are

operated by the feet of the operator;

a connection shaft for connecting said steering handle mechanism and said step

mechanism to each other, said connection shaft provided to be extendable and contractable

along the axial direction thereof; and

a frame body having at least two main frames,

wherein said steering handle mechanism is mounted at upper portions of the at least

two main frames and the connection shaft is mounted to lower portions of the at least two

main frames.